In the Claims:

Please replace claims 1, 8, 21, 34, 41, and 48, all as shown below.

1. (Currently amended): A template pattern for a reference surface of a disk connected with a hard disk drive having at least one head connected with a rotary actuator, comprising:

at least one servo wedge having a first end at an inner diameter of the disk and a second end at an outer diameter of the disk, each the at least one servo wedge including:

a plurality of pulses extending along a stroke from the first end to the second end;
a plurality of zig-bursts, each zig-burst forming a variable angle relative to the plurality
of pulses; and

a plurality of zag-bursts, each zag-burst forming a negative chevron angle relative to the plurality of pulses; and

wherein the variable angle at the second end is a chevron angle and the variable angle at the first end is less than the chevron angle.

- 2. (Original): The template pattern of claim 1, wherein the plurality of pulses trace an arc from the first end to the second end such that the arc follows a motion of the head.
- 3. (Original): The template pattern of claim 1, wherein each pulse can be continuous or discontinuous along the stroke.
- 4. (Original): The template pattern of claim 1, wherein the variable angle increases continuously between the first end and the second end.

- 5. (Original): The template pattern of claim 1, wherein the variable angle abruptly changes from less than the chevron angle to the chevron angle.
- 6. (Original): The template pattern of claim 1, wherein the chevron angle is equivalent to head skew at the first end.
- 7. (Original): The template pattern of claim 6, wherein the variable angle is constant relative to a radial line extending from the first end to the second end.
- 8. (Currently amended): A template pattern for a reference surface of a disk connected with a hard disk drive having at least one head connected with a rotary actuator, comprising:

at least one servo wedge having a first end at an inner diameter of the disk and a second end at an outer diameter of the disk, each the at least one servo wedge including:

a plurality of pulses extending along a stroke from the first end to the second end; a plurality of zig-bursts, each zig-burst forming a variable angle relative to the plurality

a plurality of zag-bursts, each zag-burst forming a negative chevron angle relative to the plurality of pulses; and

wherein the variable angle at the first end is zero and the variable angle at the second end is a chevron angle.

9. (Original): The template pattern of claim 8, wherein the plurality of pulses trace an arc from the first end to the second end such that the arc follows a motion of the head.

of pulses; and

- 10. (Original): The template pattern of claim 8, wherein each pulse can be continuous or discontinuous along the stroke.
- 11. (Original): The template pattern of claim 8, wherein the variable angle increases continuously between the first end and the second end.
- 12. (Original): The template pattern of claim 8, wherein the variable angle abruptly changes from zero to the chevron angle.
- 13. (Original): The template pattern of claim 8, wherein the chevron angle is equivalent to head skew at the first end.
- 14. (Original): The template pattern of claim 13, wherein the variable angle is constant relative to a radial line extending from the first end to the second end.
- 15. (Original): A template pattern, comprising:

at least one servo wedge having a first end and a second end, each servo wedge including:

each pulse being continuous or discontinuous;

a plurality of zig-bursts, each zig-burst forming a varying angle relative to the plurality

a plurality of pulses extending along a stroke from the first end to the second end,

of pulses; and

a plurality of zag-bursts, each zag-burst forming a negative chevron angle relative to the plurality of pulses;

wherein the varying angle at the first end is zero and the varying angle at the second

end is a chevron angle.

16. (Original): The template pattern of claim 15, wherein the plurality of pulses trace an arc from

the first end to the second end.

17. (Original): The template pattern of claim 15, wherein the variable angle increases continuously

between the first end and the second end.

18. (Original): The template pattern of claim 15, wherein the variable angle abruptly changes from

zero to the chevron angle.

19. (Original): The template pattern of claim 15, wherein the chevron angle is equivalent to head

skew at the first end.

20. (Original): The template pattern of claim 19, wherein the variable angle is constant relative to

a radial line extending from the first end to the second end.

21. (Currently amended): A template pattern for a reference surface of a disk connected with a hard

disk drive having at least one head connected with a rotary actuator, comprising:

at least one servo wedge having a first end at an inner diameter of the disk and a second end

at an outer diameter of the disk, each the at least one servo wedge including:

a plurality of pulses extending along a stroke from the first end to the second end;

a plurality of zig-bursts, each zig-burst forming a negative chevron angle relative to the plurality of pulses; and

a plurality of zag-bursts, each zag-burst forming a variable angle relative to the plurality of pulses;

wherein the variable angle at the first end is zero and the variable angle at the second end is a chevron angle.

- 22. (Original): The template pattern of claim 21, wherein the plurality of pulses trace an arc from the first end to the second end such that the arc follows a motion of the head.
- 23. (Original): The template pattern of claim 21, wherein each pulse can be continuous or discontinuous along the stroke.
- 24. (Original): The template pattern of claim 21, wherein the variable angle increases continuously between the first end and the second end.
- 25. (Original): The template pattern of claim 21, wherein the variable angle abruptly changes from zero to the chevron angle.
- 26. (Original): The template pattern of claim 21, wherein the chevron angle is equivalent to head skew at the first end.

- 27. (Original): The template pattern of claim 26, wherein the variable angle is constant relative to a radial line extending from the first end to the second end.
- 28. (Original): A template pattern, comprising:

at least one servo wedge having a first end and a second end, each servo wedge including:

a plurality of pulses extending along a stroke from the first end to the second end, each pulse being continuous or discontinuous;

a plurality of zig-bursts, each zig-burst forming a negative chevron angle relative to the plurality of pulses; and

a plurality of zag-bursts, each zag-burst forming a varying angle relative to the plurality of pulses;

wherein the varying angle at the first end is zero and the varying angle at the second end is a chevron angle.

- 29. (Original): The template pattern of claim 28, wherein the plurality of pulses trace an arc from the first end to the second end.
- 30. (Original): The template pattern of claim 28, wherein the variable angle increases continuously between the first end and the second end.
- 31. (Original): The template pattern of claim 28, wherein the variable angle abruptly changes from zero to the chevron angle.

- 32. (Original): The template pattern of claim 29, wherein the chevron angle is equivalent to head skew at the first end.
- 33. (Original): The template pattern of claim 32, wherein the variable angle is constant relative to a radial line extending from the first end to the second end.
- 34. (Currently Amended): A template pattern for a reference surface of a disk connected with a hard disk drive having at least one head connected with a rotary actuator, comprising:

at least one servo wedge having a first end and a second endk end, each servo wedge including:

a plurality of pulses extending along a stroke from the first end to the second end;
a plurality of zig-bursts, each zig-burst forming a variable angle relative to the plurality
of pulses; and

a plurality of zag-bursts, each zag-burst forming a negative chevron angle relative to the plurality of pulses; and

wherein the variable angle at the second end is a chevron angle and the variable angle at the first end is less than the chevron angle.

- 35. (Original): The template pattern of claim 34, wherein the plurality of pulses trace an arc from the first end to the second end such that the arc follows a motion of the head.
- 36. (Original): The template pattern of claim 34, wherein each pulse can be continuous or discontinuous along the stroke.

37. (Original): The template pattern of claim 34, wherein the variable angle increases continuously between the first end and the second end.

38. (Original): The template pattern of claim 34, wherein the variable angle abruptly changes from less than the chevron angle to the chevron angle.

39. (Original): The template pattern of claim 34, wherein the chevron angle is equivalent to head skew at the first end.

40. (Original): The template pattern of claim 39, wherein the variable angle is constant relative to a radial line extending from the first end to the second end.

41. (Currently Amended): A template pattern for a reference surface of a disk connected with a hard disk drive having at least one head connected with a rotary actuator, comprising:

at least one servo wedge having a first end at an inner diameter of the disk and a second end at an outer diameter of the disk, each the at least one servo wedge including:

a plurality of pulses extending along a stroke from the first end to the second end; a plurality of zig-bursts, each zig-burst forming a variable angle relative to the plurality

a plurality of zag-bursts, each zag-burst forming a negative chevron angle relative to the plurality of pulses; and

wherein the variable angle at the first end is zero and the variable angle at the second end is a chevron angle.

of pulses; and

- 42. (Original): The template pattern of claim 41, wherein the plurality of pulses trace an arc from the first end to the second end such that the arc follows a motion of the head.
- 43. (Original): The template pattern of claim 41, wherein each pulse can be continuous or discontinuous along the stroke.
- 44. (Original): The template pattern of claim 41, wherein the variable angle increases continuously between the first end and the second end.
- 45. (Original): The template pattern of claim 41, wherein the variable angle abruptly changes from zero to the chevron angle.
- 46. (Original): The template pattern of claim 41, wherein the chevron angle is equivalent to head skew at the first end.
- 47. (Original): The template pattern of claim 46, wherein the variable angle is constant relative to a radial line extending from the first end to the second end.
- 48. (Currently amended): A template pattern for a reference surface of a disk connected with a hard disk drive having at least one head connected with a rotary actuator, comprising:

at least one servo wedge having a first end at an inner diameter of the disk and a second end at an outer diameter of the disk, each the at least one servo wedge including:

a plurality of pulses extending along a stroke from the first end to the second end;

a plurality of zag-bursts, each zag-burst forming a variable angle relative to the

plurality of pulses; and

a plurality of zig-bursts, each zig-burst forming a negative chevron angle relative to

the plurality of pulses; and

wherein the variable angle at the first end is zero and the variable angle at the second

end is a chevron angle.

49. (Original): The template pattern of claim 48, wherein the plurality of pulses trace an arc from

the first end to the second end such that the arc follows a motion of the head.

50. (Original): The template pattern of claim 48, wherein each pulse can be continuous or

discontinuous along the stroke.

51. (Original): The template pattern of claim 48, wherein the variable angle increases continuously

between the first end and the second end.

52. (Original): The template pattern of claim 48, wherein the variable angle abruptly changes from

zero to the chevron angle.

53. (Original): The template pattern of claim 48, wherein the chevron angle is equivalent to head

skew at the first end.

54. (Original): The template pattern of claim 53, wherein the variable angle is constant relative to

- 11 -

a radial line extending from the first end to the second end.

Attorney Docket No.:PANA-01081US0